

Awareness and practice concerning oral cancer among Ayurveda and Homeopathy practitioners in Davangere District: A speciality-wise analysis

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Abstract

Context: In India, oral cancer accounts for one-third of all cancers. Early detection and immediate intervention can lead to marked reduction in the morbidity and mortality. In India, Ayurveda and homeopathy practitioners are distributed widely in rural and urban areas and are easily accessible. Until date, no assessment on their oral cancer knowledge and practice has been done. **Aims:** The present study was undertaken to evaluate the knowledge, awareness, and practice concerning oral cancer. **Subjects and Methods:** Questionnaire comprising 15 questions was distributed to 42 Ayurveda and 38 homeopathy doctors in Davangere District, Karnataka, India, assessing their oral examination habits, knowledge on the risk factors, patient education, clinical signs of the disease and its treatment. **Statistical Analysis Used:** The results were analyzed using Chi-square test. **Results:** Lesser number of the practitioners routinely examined oral mucosa (16.7% and 5.3%, respectively). Fewer advised their patients about the risk factors (2.4% and 2.6%). Less positive response was obtained for the correct method for confirmation of diagnosis (28.6% and 15.8%). Many doctors agreed that they had not undergone training in cancer institute ($P = 0.29$). Twenty-three (54.8%) Ayurveda and 28 (73.7%) homeopathy doctors opined that they did not have sufficient knowledge regarding early detection and prevention of oral cancer and many were desirous of receiving further information (97.6% and 84.2% respectively). **Conclusions:** This study attempts to highlight the need for improving the oral cancer knowledge and awareness among practicing Ayurveda and homeopathy doctors.

Key words: Ayurveda, homeopathy, oral cancer awareness

INTRODUCTION

Oral cancer is the sixth most common malignancy world-wide.^[1] It is a lethal and deforming disease due to widespread tumor dissemination mainly affecting the lungs and liver.^[2] There is a marked increase in the incidence oral

cancer in recent years especially in females and younger persons.^[2,3] In India, it is a matter of concern as oral cancer accounts for one-third of all cancers.^[1] Nearly 95% of oral cancers are squamous cell carcinomas.^[4] Tobacco and alcohol habits increase the risk by three to 15 folds and are responsible for 90% of oral cancers.^[1,5] Other causes of oral cancer include, human papilloma virus, candida, iron deficiency, radiation, immunosuppression, carcinogens, and tumor suppressor genes.^[6] Low intake of fresh fruits and vegetables, ageing, lower socio-economic status, and poor oral hygiene has also been implicated in oral carcinogenesis.^[2] Precancerous changes occur at sites that are easily accessible for examination through direct visualization, examination with a mouth mirror or by manual palpation.^[5,7] Clinically, these early

Access this article online	
Quick Response Code:	Website: www.jnsbm.org
	DOI: 10.4103/0976-9668.149104

lesions which precede the cancer development, presents as areas of red (erythroplakia), red-white speckled (erythroleukoplakia), white lesions (leukoplakia), and are usually asymptomatic.^[5] Detection of these early changes and immediate intervention can lead to a significant reduction in the morbidity and mortality.^[2]

In India, the dentist-population ratio is 1:10,000 which is inadequate and insufficient. In rural India, this ratio is further less, with one dentist for 2,50,000 persons.^[8] More numbers of ayurvedic and homeopathic practitioners are available in India. Ayurveda describes the variety of naturally available anti-cancer herbs for preventing or suppressing various tumors successfully.^[9] Likewise, homeopathy medicines are also available to treat cancer.^[10]

Studies related to the oral cancer knowledge have been well-documented among the medical and dental professionals. Literature search did not yield any such study on Ayurveda and homeopathy doctors. In a developing country like India, where more numbers of Ayurveda and homeopathy practitioners are available, it would be worthwhile to undertake such a study. Hence, the present study was designed to assess the knowledge, attitude and practices regarding oral cancer among Ayurvedic and Homeopathic Doctors in Davangere District, Karnataka, India.

SUBJECTS AND METHODS

Oral cancer awareness among 42 Ayurveda and 38 homeopathy professionals was assessed using a questionnaire consisting of fifteen questions [Annexure 1]. They were randomly selected from different zones of Davangere District. The questions were designed to assess: oral examination habits, knowledge of the risk factors and its delivery to patients, any additional training in cancer institute, opportunity to examine patients with early oral lesions, recognition of clinical signs, point of referral, opinion on the sufficiency of knowledge in diagnosis, treatment, prevention and its complications, and the desire for further updation of knowledge on oral cancer. The questionnaire took 10 min to complete. Ethical clearance was obtained from the Institutional Review Board and written informed consent form was obtained from the participants. The results were analyzed using Chi-square test.

RESULTS

Independently filled questionnaires were returned by all the participants. Total number of practitioners in each specialty and their response to the questions are shown in Table 1.

ANNEXURE 1

Questionnaire

This questionnaire utilizes the information for improving the knowledge for prevention and early detection of oral cancer. Kindly tick mark, the appropriate answer(s). Your answers will be treated strictly confidential. Thank you for sparing your precious time

Faculty-Ayurveda/Homeopathy

1. Do you routinely carry out oral mucosal examination? Yes/No
2. Is alcohol consumption a cause for oral cancer? Yes/No
3. Various forms of tobacco (cigarettes, cigars, pipes) causes oral cancer Yes/No
4. Oral cancer is a disease of older age Yes/No
5. Clinically have you seen any patients with oral cancer? Yes/No
6. Early cancer clinically appears as innocuous white and/or red lesion. Yes/No
7. Have you undergone training or posting in an oral cancer center? Yes/No
8. Do you attend continuing educating programs/conferences regularly? Yes/No
9. Do you advise patients about the risk factors of oral cancer? Yes/No
10. Delayed diagnosis leads to local extension and has risk of metastatic spread Yes/No
11. Can treat oral cancer? Yes/No
12. The best technique to confirm diagnosis is
 - a. Scalpel biopsy
 - b. Brush biopsy
 - c. Exfoliative cytology
13. If you diagnose a confirmed case of oral cancer, where do you refer to?
 - a. Taluk hospital
 - b. District hospital
 - c. Regional cancer center
14. Do you have sufficient knowledge in prevention and detection of oral cancer? Yes/No
15. Would you like to receive further information/teaching on oral cancer? Yes/No

Percentage of positive response to the questionnaire by Ayurveda and homeopathy practitioners is shown in Figure 1.

Response to questions on oral cancer screening practices

Very few Ayurveda (16.7%) and Homeopathy (5.3%) doctors routinely examined oral mucosa of patients attending their practice. Only 21% of Ayurveda practitioners had seen clinical cases of oral cancer and 33% could identify

the precancerous lesions. Fewer responded correctly for the question asked on the method for confirmation of diagnosis (Ayurveda-28.6% and homeopathy-15.8%) [Table 2]. Most Ayurveda (76.2%) and homeopathy (86.8%) doctors were not confident about treating oral cancer and very few advised their patients on the risk factors of oral cancer (2.4% and 2.6% respectively).

Response to questions about knowledge on oral cancer

Twenty (47.65%) Ayurveda specialists responded positively when asked about the relation of the age factor and oral

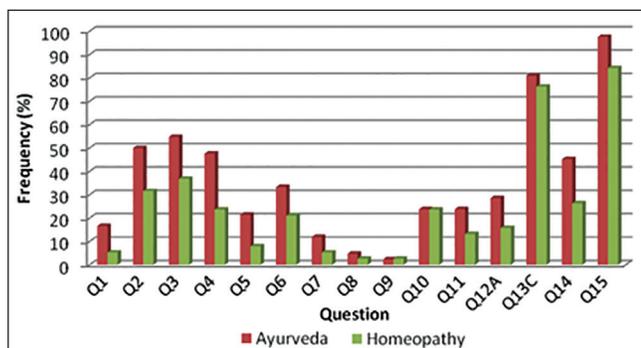


Figure 1: Percentage of Ayurveda and homeopathy practitioners with positive response

Table 1: Total practitioners in each specialty and their response to the questionnaire

Question no.	Ayurveda (n = 42)		Homeopathy (n = 38)	
	Yes (%)	No (%)	Yes (%)	No (%)
1	07 (16.7)	35 (83.3)	02 (5.3)	36 (94.7)
2	21 (50.0)	21 (50.0)	12 (31.6)	26 (68.4)
3	23 (54.8)	19 (45.2)	14 (36.8)	24 (63.2)
4	20 (47.6)	22 (52.4)	09 (23.7)	29 (76.3)
5	09 (21.4)	33 (78.6)	03 (7.9)	35 (92.1)
6	14 (33.3)	28 (66.7)	08 (21.1)	30 (78.9)
7	05 (11.9)	37 (88.1)	02 (5.3)	36 (94.7)
8	02 (4.8)	40 (95.2)	01 (2.6)	37 (97.4)
9	01 (2.4)	41 (97.6)	01 (2.6)	37 (97.4)
10	10 (23.8)	32 (76.2)	09 (23.7)	29 (76.3)
11	10 (23.8)	32 (76.2)	05 (13.2)	33 (86.8)
14	19 (45.2)	23 (54.8)	10 (26.3)	28 (73.7)
15	41 (97.6)	01 (2.4)	32 (84.2)	06 (15.8)

cancer. There was a poor understanding in both specialties that delayed diagnosis could lead to local extension and increased risk of metastatic spread ($P = 0.99$). Many doctors agreed that they had not undergone training in cancer institute ($P = 0.29$) and hadn't attended continuing educational programs regularly ($P = 0.62$). Majority selected regional cancer center as the point of referral for a patient with oral cancer [Table 3].

Response to attitude questions on oral cancer

Twenty-three (54.8%) Ayurveda and 28 (73.7%) homeopathy doctors agreed that they did not have sufficient knowledge regarding early detection and prevention of oral cancer and many were desirous of receiving further information (97.6% and 84.2%, respectively).

DISCUSSION

Studies have shown that 36% of patients with oral cancer have localized disease at the time of presentation.^[5] Early recognition and referral of such lesions not only improves the survival rate by up to 90%, but also lowers the cost and morbidity associated with the treatment.^[3,7] Nearly 50% of patients with oral malignancy die as a result of direct consequence of the disease.^[2] Admission to hospital provides an opportunity for screening oral cancer.^[11] Hence, the clinician should be well aware of the precancerous lesions and initiate immediate treatment. An oral cancer examination could take as little as 90 s to perform.^[12] In the present study, fewer doctors from both specialties routinely carried out oral mucosal examination of patients who attended their practice. Hence, oral examination should be made a mandatory part of patient examination irrespective of the specialty. In the present study, the knowledge regarding risk factors for oral cancer was found to be better in Ayurveda practitioner than in homeopathy. However, both of them failed to pass the information to their patients. Delay in diagnosis will lead to delay in treatment. One should be suspicious when any non-healing lesion occurs at cancer predilection sites.^[5,13] In the present study, lesser number of practitioners had seen oral cancer clinically and only 14 (33%) Ayurveda

Table 2: Practitioners response on the confirmed technique for diagnosis of oral cancer

Q. 12	Scalpel biopsy		Brush biopsy		Exfoliative biopsy	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Ayurveda	12 (28.6)	30 (71.4)	20 (47.6)	22 (52.4)	10 (23.8)	32 (76.2)
Homeopathy	6 (15.8)	32 (84.2)	17 (44.7)	21 (55.3)	15 (39.5)	23 (60.5)

Table 3: Practitioners response on the point of referral

Q. 13	Taluk hospital		District hospital		Regional cancer center	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Ayurveda	03 (7.1)	39 (92.9)	05 (11.9)	37 (88.1)	34 (81.0)	08 (19)
Homeopathy	04 (10.5)	34 (89.5)	05 (13.2)	33 (86.8)	29 (76.3)	09 (23.7)

and 8 (21%) homeopathy practitioners were aware of the clinical appearance of the early lesions. There was a poor understanding of the consequences of delayed diagnosis in both specialties. Twenty-three (54.8%) Ayurveda and 28 (73.7%) homeopathy doctors agreed that they did not have sufficient knowledge regarding early detection and prevention of oral cancer. These responses reflect the lacking knowledge of Ayurveda and homeopathy practitioners.

Surprisingly majority practitioners selected regional cancer center as the referral point for a patient with oral cancer. This could probably be because of the term ‘cancer’ used in one of the options. Above 80% of practitioners from both specialties were desirous of receiving further information on oral cancer, which is consistent with previous reports.^[14]

Overall insufficiency of oral cancer knowledge among Ayurveda and homeopathy doctors was evident in the current study. Hence, there is a strong need to strengthen the knowledge, awareness and attitude concerning oral cancer in all practitioners irrespective of their specialty. Greater emphasis should be given for the teaching on oral cancer during undergraduate level.

ACKNOWLEDGEMENT

The authors would like to thank all the staff members of Surendera Dental College and Research Institute, Sri Ganganagr who have contributed significantly toward this study by their valuable knowledge and experience.

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How to cite this article: Kulkarni RS, Arun PD, Rai R, Kanth VS, Sargaiyan V, Kandasamy S. Awareness and practice concerning oral cancer among Ayurveda and Homeopathy practitioners in Davangere District: A speciality-wise analysis. J Nat Sc Biol Med 2015;6:116-9.

Source of Support: Nil. **Conflict of Interest:** None declared.